Saskatchewan
Agriculture
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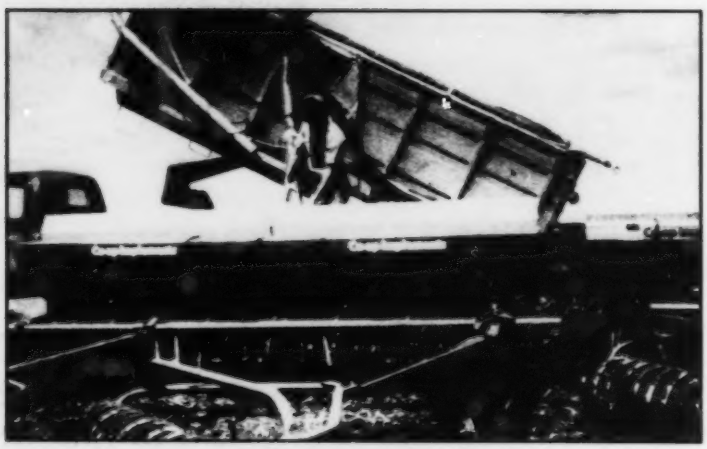

Cost of Producing Grain Crops in Saskatchewan 1992

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Foreword

A manager of a business must keep in mind the fact that we live in a changing world. To successfully manage a business, a manager must be able to recognize and plan for changing conditions. A thorough knowledge of both production and financial requirements for each crop produced in a farm business is needed to successfully deal with the changes that have and will continue to take place in the agricultural industry.

The Top Management program uses a computer forward planning model that generates a cost of production report as well as projected financial statements for the next five years. This computer model allows a farm manager to enter information on his farm business, develop different scenarios for the future and test the strength of the farm business.

This bulletin provides an outline of the Top Management program and a summary of the information gathered. Average estimates of the cost to produce and return received per acre are provided on a crop and soil zone basis. With this information a farm manager will be able to assess the performance of this farm business as it relates to other farm businesses producing the same crops. This information will also be of use to individuals who are considering producing a crop for the first time as it will provide a guide to the cost and return associated with each crop.

This publication was prepared by the Farm Management Section of the Economics Branch, Saskatchewan Agriculture and Food. The contribution of individuals who assisted in compiling the data and information for this publication is gratefully acknowledged. A special thank you is extended to Saskatchewan farmers who participated in the Top Management program, and to Tom Thorson and his staff for their work with the Top Management program.

Farm Management Section
Economics Branch
Saskatchewan Agriculture and Food
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Introduction

This publication deals with the cost of producing a crop and the expected income for 1992. The information was obtained from an analysis of the data provided by 132 farmers who participated in the Top Management program. The farms are categorized by soil zone. Estimates of the average cost to produce each specific crop in 1992 as well as an estimate for income is calculated.

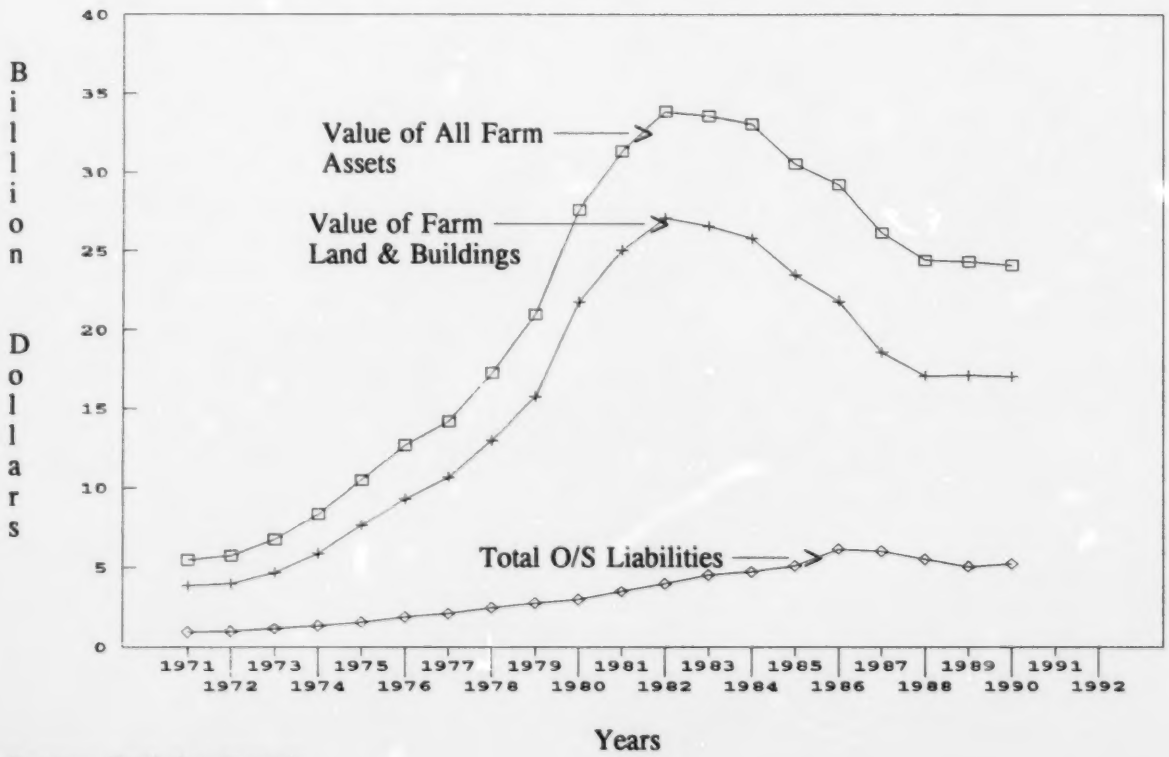
Care must be exercised in interpreting the cost of production statement in this publication. While the statements are based on actual projected farm data for 1992, it must be recognized that the sample size is quite small and is not statistically drawn. Thus, the results should not be interpreted as provincial averages but should be used as a guide to the cost and returns associated with each specific crop.

Real Estate Values

Saskatchewan farm real estate values have declined each year since 1982. The decline in value is approximately 35% to the end of 1990 from the peak of almost $27 billion in 1982. Since 1988 farm real estate values have remained nearly unchanged.

The declines in land values in the 1980s is in sharp contrast to the steady and rapid increases during the 1970s when grain prices were increasing and interest rates were favourable.

Farm Assets and Liabilities
Trends from 1970 to 1990



Source: Statistics Canada

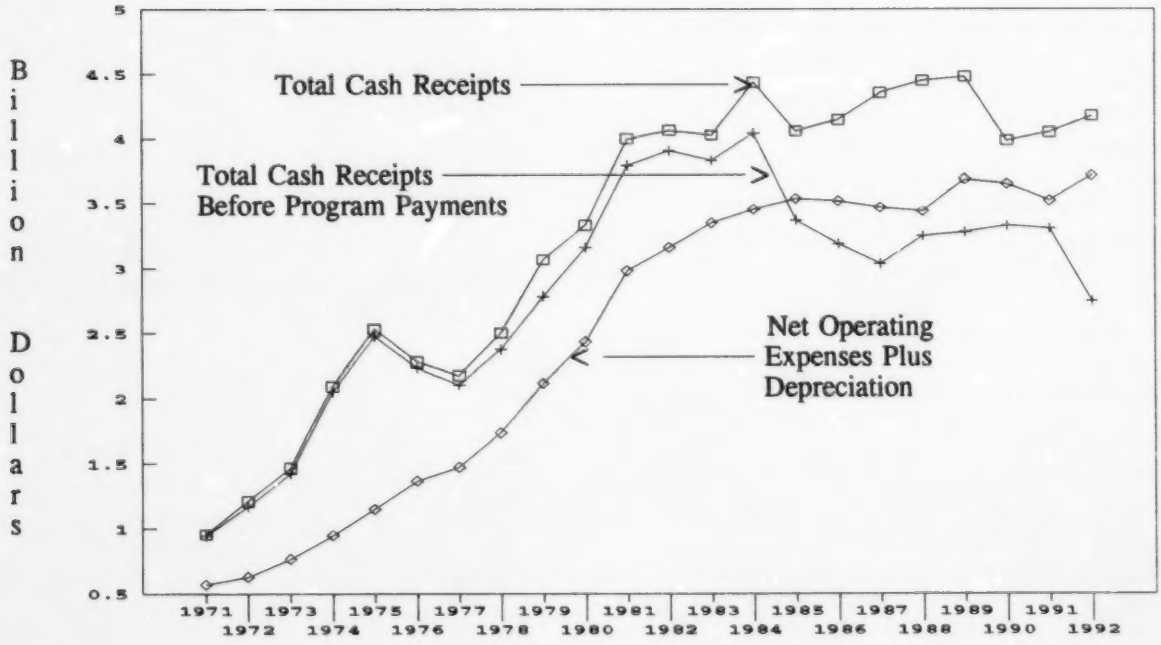
Farm Income Trends

Total cash receipts for Saskatchewan farmers fluctuates from year to year as a result of changes in crop yields, sales and prices. Program payments have been important during the 1980s and will again play an important part in the profitability of grain farms in 1992. Program payments are made up of payments from the GRIP program, Crop Insurance program, Western Grain Stabilization, NISA and other miscellaneous programs.

Total cash receipts for 1992 are forecasted to be $4.17 billion, up 3% from 1991. Crop receipts however, are expected to drop by 21% due to lower grain prices. In 1992 program payments are expected to increase substantially. This forecast was prepared in December 1991. Improved grain prices will result in higher cash receipts for 1992.

Total cash receipts before program payments were greater than net operating expenses and depreciation until 1984. Since 1984 cash receipts before program payments have not covered operating cost and depreciation. Without program payments over the last nine years the Saskatchewan agriculture industry would have recorded negative net cash income figures each year.

Farm Income Trends
1971 to 1992



** 1991 figures and 1992 figures are a forecast
Source: Statistics Canada

Methodology

The Top Management computer model allows farm managers to enter their cropping plans for the next five years. The computer model calculates detailed cost and returns for each crop for 1992 and a summary of income and expenses for the following four years. The cost and returns shown in this publication are an average of the detailed estimates calculated for each farmer for 1992. Figures were not calculated for a crop if less than five farmers planned to produce the crop or if less than 500 acres were sown to the crop in 1992. The average cost per acre for each crop is calculated as a weighted average. Using this approach will result in the figures being closer to the cost estimates provided by the larger farmers. In addition, the participants in the Top Management program have farm operations somewhat larger than the average farm size for the province.

With a larger number of participants, average per acre figures could be calculated for specific farm sizes. The data collection program that was carried on by the Economics Branch from 1980 to 1985 had a sample size large enough to allow for an comparison of per acre costs and returns of different size farm operations. This comparison of costs and returns showed that farm size had very little effect on the per acre costs and income of a farm. The personal living expenses on a per acre basis does, however vary substantially with farm size. Larger farms had a substantially lower cost per acre for living expenses.

Hired labour cost, in these statements, is calculated as an average for each soil zone . Depreciation for buildings and equipment, in these statements, is equal to one-half of the amount calculated by the Top Management program for capital recovery (the Top Management program includes depreciation and interest on investment in the figure for capital recovery). All other figures for costs and income are calculated as a weighted average from the Top Management data.

The estimate provided by farmers for this year's income includes only the income from this year's expect crop. Miscellaneous income and income from program payments (GRIP and NISA) have not been included as there was a number of proposals to change GRIP at the time that the Top Management program was being completed.

Due to the uncertainty with the proposed changes for GRIP, the cash cost does not include an amount to cover the GRIP premium. As a result cash cost have shown a large decrease from 1991.

Cash cost per bushel is calculated by dividing the average yield into the total cash costs. Depreciation and fallow costs are not included in the calculation. This figure can be used to compare farm enterprises and cropping choices as well as comparing one farm with another.

Net Farm Cash Income is the difference between the total income calculated on an accrual basis and total cash expenses. This amount represents the actual dollars that a farmer has from each crop to cover his living costs, loan payments, and to accumulate savings.

Net Farm Income is the difference between the total income calculated on the accrual basis for each crop and the total cash expenses plus depreciation. This amount represents the return to the farmer's labour, management and investment.

General Information

The following information is calculated as a simple average from all of 132 farmers who participated in the Top Management program this year.

1992 seeding intentions as a percentage of the total crop acres:

	Summer-fallow	Wheat	Barley	Canola	Flax	Other
1988 planned seeding intentions	32.3%	43.8%	8.9%	10.4%	3.3%	1.1%
1989 planned seeding intentions	29.3%	44.7%	11.6%	9.1%	2.7%	2.2%
1990 planned seeding intentions	28.5%	43.0%	10.0%	6.6%	3.5%	8.2%
1991 planned seeding intentions	29.9%	43.5%	8.1%	6.4%	2.6%	9.2%
1992 planned seeding intentions	23.8%	40.3%	7.2%	10.1%	1.5%	17.1%
Percentage of 1991	79.6%	92.6%	88.9%	156.87%	57.7%	185.7%

Average farm size	1914 acres
Average owned acres	1147 acres
Average crop share leased acres	397 acres
Average cash leased acres	370 acres
Total investment per owned acre	$682
Total debt per owned acre	$150
Average interest paid per owned acre	$14.26
Total debt servicing per owned acre	$30.44
Total debt to net worth ratio	.31
Total debt to total asset ratio	.22
Average percent equity	78%
Number of farms with more than 90% equity	15
Number of farms with 70% to 90% equity	59
Number of farms with 50% to 70% equity	37
Number of farms with less than 50% equity	21

	Farms with more than 90% equity	Farms with 70% to 90% equity	Farms with 50% to 70% equity	Farms with less than 50% equity
Average number of acres	1,975	1,929	1,903	1,846
Average number of owned acres	1,172	1,272	1,099	860
Percent owned land	59%	66%	58%	47%
Projected income per acre*	71.48	80.64	77.43	92.90
Projected cash expense/acre**	40.52	44.98	44.97	52.60
Return above cash expenses	30.96	35.66	32.45	40.30

Average off farm income $5,063.73 - 44% of the farms have off farm income
Average off farm income for those farms reporting off farm income was $11,524.36.

* This figure includes only crop income (payments from program and miscellaneous farm incomes are not included)
** This figure does not include interest or principle payments, cost of living or depreciation.

Table 1: Cost of Production Averages - All Farms

	1988	1989	1990	1991	1992
Number in this group	130	130	136	134	132
Average farm size*	1,712	1,860	1,793	1889	1914
Percent cropped	72%	76%	77%	72%	76%
Investment in equipment*	$ 88	$ 90	$ 86	$85	$94
Investment in buildings*	$ 8	$ 27	$ 26	$26	$28
Market value of farmland	$348	$297	$312	$290	$292
Projected Income		**Dollars Per Acre**			
Grain income					82.64
Total Income					*82.64*
Projected Expenses					
Crop inputs					
Seed	3.59	4.79	4.70	4.15	4.67
Fertilizer					
Nitrogen	3.68	3.51	3.37	2.66	3.90
Phosphorus	3.13	3.21	2.84	2.41	2.30
Other fertilizer	.90	1.19	0.81	1.00	1.62
Chemical					
Herbicide	7.14	7.50	7.10	7.61	7.45
Insecticide	.18	0.04	0.12	0.09	.12
Crop insurance	1.82	2.01	2.52	2.48	1.88
Hail insurance	.56	0.55	0.45	0.31	.50
Miscellaneous crop inputs	.43	0.39	1.12	1.15	2.35
Total Crop Inputs	*21.43*	*23.19*	*23.03*	*21.86*	*24.79*
Equipment and Building Expenses					
Fuel, oil and lubricants	4.28	4.05	4.11	4.77	3.88
Repairs and maintenance	4.26	4.58	4.19	4.08	4.53
Miscellaneous	2.76	0.52	0.51	0.25	.52
Indirect equipment expenses	.62	2.67	2.58	2.78	2.61
Total Equipment Expenses	*11.92*	*11.82*	*11.39*	*11.88*	*11.54*
Other Expenses					
Labour	5.20	7.68	6.62	4.64	4.93
Property taxes	2.69	2.00	2.78	2.89	2.96
Miscellaneous	3.75	3.99	4.46	5.58	3.97
Operating interest	1.82	1.93	1.89	2.13	1.95
Total Other Costs	*13.46*	*15.60*	*15.75*	*15.24*	*13.81*
Total Cash Costs	*46.81*	*50.61*	*50.17*	*48.98*	*50.14*
Depreciation buildings and equipment	13.66	13.77	13.10	12.14	12.45
Total Cash and Depreciation Cost	*60.47*	*64.38*	*63.27*	*61.12*	*62.59*
Net Farm Cash Income					**32.50**
Net Farm Income					**20.05**
Living Costs	**9.76**	**9.82**	**10.74**	**10.61**	**8.17**
Number of Gallons Fuel per Acre	**2.9**	**2.8**	**2.46**	**2.44**	**2.46**

* All owned and leased acres

Table 1.1: Cost of Production Averages by Soil Zone - 1992

	Brown Soil Zone	Dark Brown Soil Zone	Black Soil Zone
Number in this group	25	49	58
Average farm size*	2,090	1,864	1,880
Percent cropped	60%	71%	90%
Investment in equipment*	$ 73	$ 94	$104
Investment in buildings*	$ 21	$ 21	$ 37
Market value of farmland	$287	$297	$291
Projected Income		**Dollars Per Acre**	
Grain income	49.01	68.29	112.56
Total Income	*49.01*	*68.29*	*112.56*
Projected Expenses			
Crop inputs			
Seed	2.81	4.20	6.04
Fertilizer			
Nitrogen	0.38	2.03	7.36
Phosphorus	0.77	1.89	3.47
Other fertilizer	0.29	0.85	2.99
Chemical			
Herbicide	4.26	6.09	10.57
Crop insurance	1.82	1.97	1.83
Hail insurance	0.38	0.46	0.60
Miscellaneous crop inputs	1.91	0.76	4.52
Total Crop Inputs	*11.62*	*18.25*	*37.38*
Equipment and Building Expenses			
Fuel, oil and lubricants	2.87	3.71	4.55
Repairs and maintenance	3.29	3.77	5.85
Miscellaneous	2.04	2.45	4.29
Total Equipment Expenses	*8.20*	*9.93*	*14.69*
Other Expenses			
Labour	5.01	4.79	5.02
Property taxes	2.90	2.80	3.13
Miscellaneous	3.25	3.70	4.57
Operating interest	1.08	1.58	2.72
Total Other Costs	*12.24*	*12.87*	*15.44*
Total Cash Costs	*32.06*	*41.05*	*67.51*
Depreciation buildings and equipment	9.50	11.74	14.59
Total Cash and Depreciation Cost	*41.56*	*52.79*	*82.10*
Net Farm Cash Income	**16.95**	**27.24**	**45.05**
Net Farm Income	**7.45**	**15.50**	**30.46**
Living Costs	**6.95**	**9.10**	**7.98**
Number of Gallons Fuel per Acre	**1.65**	**2.18**	**3.12**

* All owned and leased land

Crop Averages For The Brown Soil Zone

Crop Income

Crop Inputs

Total Equipment Costs

Miscellaneous Cash Costs

Depreciation of Buildings and Equipment

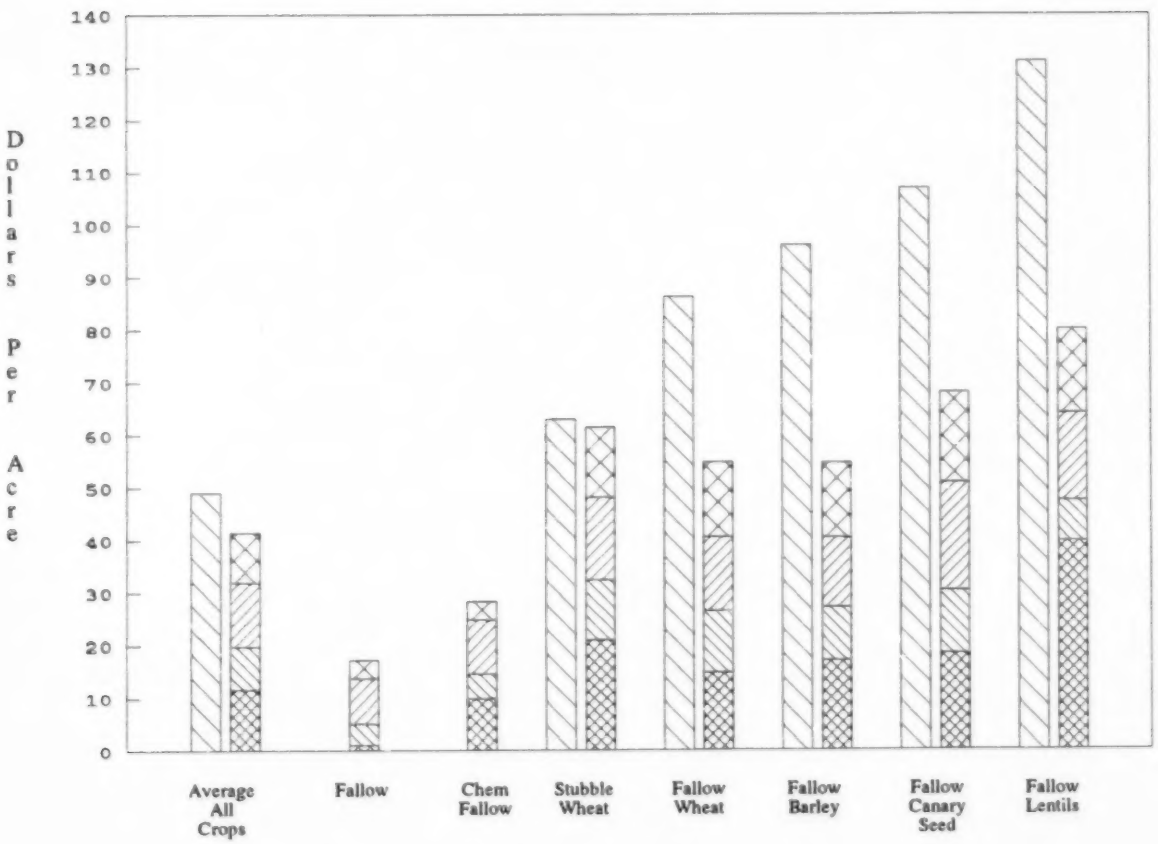


Table 2.1: Brown Soil Zone

	Summerfallow	Chem Fallow	Wheat On Fallow
Number of fields in this group	27	11	45
Total acres in this crop	15129	3550	12744
Projected Income		**Dollars Per Acre**	
Price per bushel	0	0	3.08
Yield per acre	0	0	28
Total Income	*0*	*0*	*86.24*
Projected Expenses			
Crop inputs			
Seed	0	0	4.29
Fertilizer			
Nitrogen	0	0	0.26
Phosphorus	0	0	0.95
Other fertilizer	0	0	0.23
Chemical			
Herbicide	1.10	9.85	3.92
Insecticide	0	0	0
Crop insurance	0	0	3.00
Hail insurance	0	0	0.74
Miscellaneous crop inputs	0	0	1.44
Total Crop Inputs	*1.10*	*9.85*	*14.83*
Equipment & Building Expenses			
Fuel, oil and lubricants	2.15	1.12	3.71
Repairs and maintenance	1.46	2.35	4.61
Indirect equipment expenses	0.59	1.37	3.29
Total Equipment Expenses	*4.20*	*4.84*	*11.61*
Other Expenses			
Labour	5.01	5.01	5.01
Property taxes	2.52	2.55	2.66
Miscellaneous	0.79	1.90	4.93
Operating interest	0.24	0.80	1.55
Total Other Costs	*8.56*	*10.26*	*14.15*
Total Cash Costs	*13.86*	*24.95*	*40.59*
Total Cash Cost/Bushel			*1.45*
Depreciation buildings & equipment	3.46	3.42	14.23
Total Cash & Depreciation Cost	*17.32*	*28.37*	*54.82*
Net Farm Cash Income	**-13.86**	**-24.95**	**45.65**
Net Farm Income	**-17.32**	**-28.37**	**31.42**
Direct time per acre (hours)	**0.23**	**0.17**	**0.51**
Number of gallons fuel per acre	**1.26**	**0.65**	**2.13**
Investment in equipment per acre	**33.94**	**25.11**	**98.67**

Table 2.2: Brown Soil Zone

	Barley On Fallow	Canary Seed On Fallow	Lentils On Fallow
Number of fields in this group	10	5	6
Total acres in this crop	2332	875	1730
Projected Income		**Dollars Per Acre**	
Price per bushel	2.53	4.11	8.19
Yield per acre	38	26	16
Total Income	*96.14*	*106.86*	*131.04*
Projected Expenses			
Crop inputs			
Seed	3.31	3.44	15.64
Fertilizer			
Nitrogen	0.44	0	0
Phosphorus	2.85	0.64	2.14
Other fertilizer	0.19	0	0
Chemical			
Herbicide	4.75	8.71	15.00
Insecticide	0	0	0
Crop insurance	2.78	4.78	6.09
Hail insurance	1.12	0.51	0.64
Miscellaneous crop inputs	1.62	0.28	0.12
Total Crop Inputs	*17.06*	*18.36*	*39.63*
Equipment & Building Expenses			
Fuel, oil and lubricants	3.03	3.27	2.74
Repairs and maintenance	4.22	3.96	2.73
Indirect equipment expenses	2.92	4.69	2.28
Total Equipment Expenses	*10.17*	*11.92*	*7.75*
Other Expenses			
Labour	5.01	5.01	5.01
Property taxes	3.16	4.87	3.51
Miscellaneous	3.69	9.02	5.57
Operating interest	1.45	1.62	2.69
Total Other Costs	*13.31*	*20.52*	*16.78*
Total Cash Costs	*40.54*	*50.80*	*64.16*
Total Cash Cost/Bushel	*1.07*	*1.95*	*4.01*
Depreciation buildings & equipment	14.17	17.22	15.86
Total Cash & Depreciation Cost	*54.71*	*68.02*	*80.02*
Net Farm Cash Income	**55.60**	**56.06**	**66.88**
Net Farm Income	**41.43**	**38.84**	**51.02**
Direct time per acre (hours)	**0.53**	**0.50**	**0.45**
Number of gallons fuel per acre	**1.72**	**1.89**	**1.70**
Investment in equipment per acre	**112.68**	**89.84**	**84.75**

Table 2.3: Brown Soil Zone

	Wheat On Stubble
Number of fields in this group	27
Total acres in this crop	5088
Projected Income	**Dollars Per Acre**
Price per bushel	3.15
Yield per acre	20
Total Income	*63.00*
Projected Expenses	
Crop inputs	
Seed	4.28
Fertilizer	
Nitrogen	2.10
Phosphorus	1.30
Other fertilizer	1.05
Chemical	
Herbicide	6.15
Insecticide	0
Crop insurance	2.89
Hail insurance	0.38
Miscellaneous crop inputs	2.78
Total Crop Inputs	*20.93*
Equipment & Building Expenses	
Fuel, oil and lubricants	3.69
Repairs and maintenance	4.89
Indirect equipment expenses	3.08
Total Equipment Expenses	*11.66*
Other Expenses	
Labour	5.01
Property taxes	4.06
Miscellaneous	4.98
Operating interest	1.68
Total Other Costs	*15.73*
Total Cash Costs	*48.32*
Total Cash Cost/Bushel	*2.42*
Depreciation buildings & equipment	13.31
Total Cash & Depreciation Cost	*61.63*
Net Farm Cash Income	**14.68**
Net Farm Income	**1.37**
Direct time per acre (hours)	**0.50**
Number of gallons fuel per acre	**2.10**
Investment in equipment per acre	**86.69**

Crop Averages For The Dark Brown Soil Zone

Crop Income

Crop Inputs

Total Equipment Costs

Miscellaneous Cash Costs

Depreciation of Buildings and Equipment

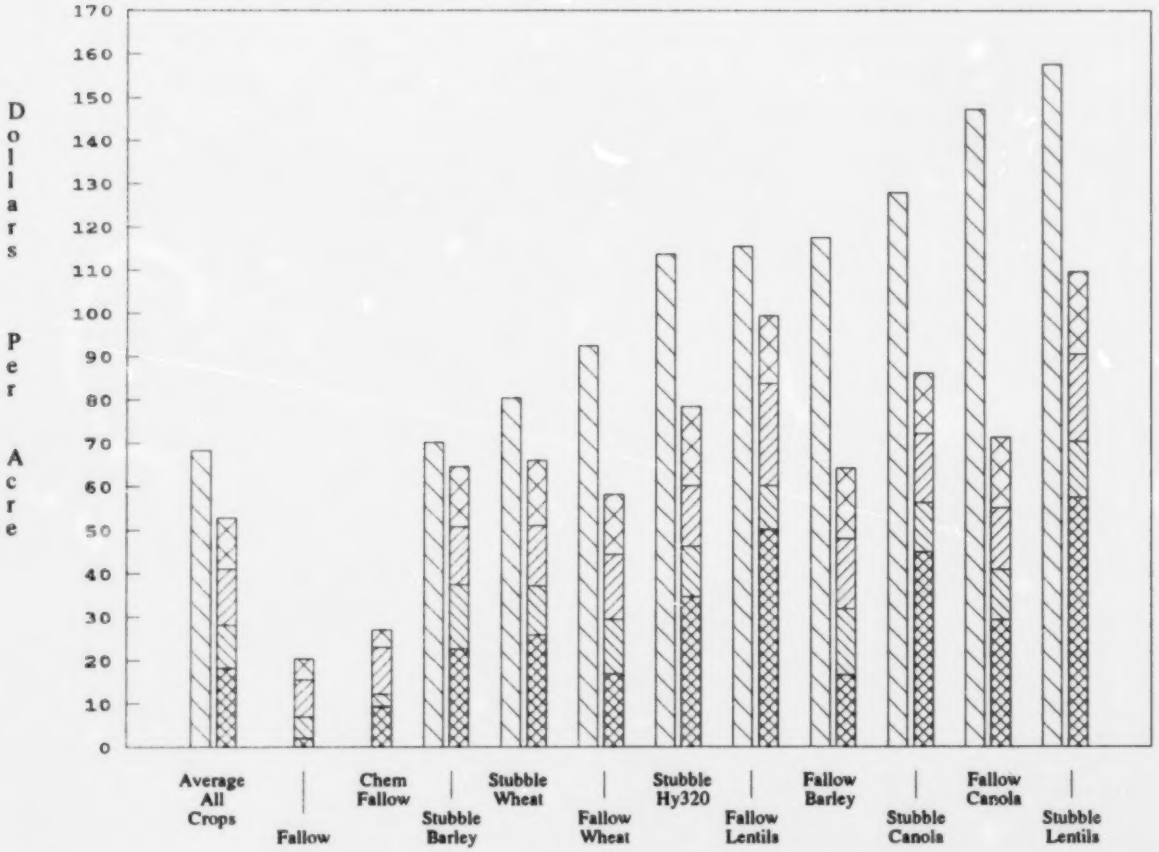


Table 3.1: Dark Brown Soil Zone

	Summerfallow	Chem Fallow	Wheat On Fallow
Number of fields in this group	47	9	71
Total acres in this crop	21551	1846	19152
Projected Income		**Dollars Per Acre**	
Price per bushel	0	0	2.98
Yield per acre	0	0	31
Total Income	*0*	*0*	*92.38*
Projected Expenses			
Crop inputs			
Seed	0	0	4.91
Fertilizer			
Nitrogen	0	0	0.11
Phosphorus	0	0	1.68
Other fertilizer	0.08	0.72	0.26
Chemical			
Herbicide	1.99	8.64	6.45
Insecticide	0	0	0.03
Crop insurance	0	0	2.37
Hail insurance	0	0	0.66
Miscellaneous crop inputs	0.01	0	0.51
Total Crop Inputs	*2.08*	*9.36*	*16.98*
Equipment & Building Expenses			
Fuel, oil and lubricants	2.43	0.92	4.49
Repairs and maintenance	1.83	1.19	4.52
Indirect equipment expenses	0.80	0.79	3.69
Total Equipment Expenses	*5.06*	*2.90*	*12.70*
Other Expenses			
Labour	4.79	4.79	4.79
Property taxes	2.47	4.04	2.75
Miscellaneous	0.92	1.44	5.65
Operating interest	0.32	0.56	1.74
Total Other Costs	*8.50*	*10.83*	*14.93*
Total Cash Costs	*15.64*	*23.09*	*44.61*
Total Cash Cost/Bushel			*1.44*
Depreciation buildings & equipment	4.82	3.96	13.66
Total Cash & Depreciation Cost	*20.46*	*27.05*	*58.27*
Net Farm Cash Income	**-15.64**	**-23.09**	**47.77**
Net Farm Income	**-20.46**	**-27.05**	**34.11**
Direct time per acre (hours)	**0.26**	**0.14**	**0.55**
Number of gallons fuel per acre	**1.45**	**0.45**	**2.54**
Investment in equipment per acre	**47.30**	**27.61**	**107.26**

Table 3.2: Dark Brown Soil Zone

	Barley On Fallow	Canola On Fallow	Lentils On Fallow
Number of fields in this group	6	21	7
Total acres in this crop	1035	5488	734
Projected Income		**Dollars Per Acre**	
Price per bushel	2.26	5.89	6.80
Yield per acre	52	25	17
Total Income	*117.52*	*147.25*	*115.60*
Projected Expenses			
Crop inputs			
Seed	3.94	5.84	21.67
Fertilizer			
Nitrogen	0.07	0.27	0.74
Phosphorus	3.93	3.78	1.47
Other fertilizer	0	2.00	0.81
Chemical			
Herbicide	6.62	9.72	19.03
Insecticide	0	0.73	0
Crop insurance	1.28	4.04	6.08
Hail insurance	0.69	0.48	0.27
Miscellaneous crop inputs	0	2.51	0.05
Total Crop Inputs	*16.53*	*29.37*	*50.12*
Equipment & Building Expenses			
Fuel, oil and lubricants	5.56	4.04	3.98
Repairs and maintenance	6.62	4.43	2.32
Indirect equipment expenses	3.11	3.24	3.89
Total Equipment Expenses	*15.29*	*11.71*	*10.19*
Other Expenses			
Labour	4.79	4.79	4.79
Property taxes	3.48	2.77	2.83
Miscellaneous	6.06	4.23	12.15
Operating interest	1.77	2.33	3.86
Total Other Costs	*16.10*	*14.12*	*23.63*
Total Cash Costs	*47.92*	*55.20*	*83.94*
Total Cash Cost/Bushel	*0.92*	*2.21*	*4.94*
Depreciation buildings & equipment	16.20	16.41	15.55
Total Cash & Depreciation Cost	*64.12*	*71.61*	*99.49*
Net Farm Cash Income	**69.60**	**92.05**	**31.66**
Net Farm Income	**53.40**	**75.64**	**16.11**
Direct time per acre (hours)	**0.70**	**0.58**	**0.70**
Number of gallons fuel per acre	**2.96**	**2.39**	**2.39**
Investment in equipment per acre	**101.13**	**107.78**	**127.62**

Table 3.3: Dark Brown Soil Zone

	Wheat On Stubble	Barley On Stubble	Canola On Stubble
Number of fields in this group	72	22	8
Total acres in this crop	17497	2598	1547
Projected Income		**Dollars Per Acre**	
Price per bushel	3.09	1.71	6.09
Yield per acre	26	41	21
Total Income	*80.34*	*70.11*	*127.89*
Projected Expenses			
Crop inputs			
Seed	5.05	4.36	6.23
Fertilizer			
Nitrogen	5.74	5.00	11.01
Phosphorus	3.19	2.46	3.80
Other fertilizer	1.57	1.46	2.00
Chemical			
Herbicide	6.17	3.65	12.74
Insecticide	0.29	0.15	2.49
Crop insurance	2.28	2.44	4.38
Hail insurance	0.43	0.22	1.05
Miscellaneous crop inputs	1.12	2.90	1.22
Total Crop Inputs	*25.84*	*22.64*	*44.92*
Equipment & Building Expenses			
Fuel, oil and lubricants	4.14	5.81	3.74
Repairs and maintenance	4.52	6.27	4.44
Indirect equipment expenses	2.96	2.81	3.54
Total Equipment Expenses	*11.62*	*14.89*	*11.72*
Other Expenses			
Labour	4.79	4.79	4.79
Property taxes	3.02	2.86	3.59
Miscellaneous	3.94	3.75	4.56
Operating interest	2.13	2.03	3.01
Total Other Costs	*13.88*	*13.43*	*15.95*
Total Cash Costs	*51.34*	*50.96*	*72.59*
Total Cash Cost/Bushel	*1.97*	*1.24*	*3.46*
Depreciation buildings & equipment	14.90	13.67	14.01
Total Cash & Depreciation Cost	*66.24*	*64.63*	*86.60*
Net Farm Cash Income	**29**	**19.15**	**55.30**
Net Farm Income	**14.10**	**5.48**	**41.29**
Direct time per acre (hours)	**0.56**	**0.69**	**0.59**
Number of gallons fuel per acre	**2.48**	**3.09**	**2.31**
Investment in equipment per acre	**102.75**	**111.11**	**98.33**

Table 3.4: Dark Brown Soil Zone

	HY320 On Stubble	Lentils On Stubble
Number of fields in this group	7	16
Total acres in this crop	1639	2705
Projected Income	**Dollars Per Acre**	
Price per bushel	2.77	8.30
Yield per acre	41	19
Total Income	*113.57*	*157.70*
Projected Expenses		
Crop inputs		
Seed	7.09	20.20
Fertilizer		
Nitrogen	11.40	0.13
Phosphorus	4.05	4.20
Other fertilizer	0	4.23
Chemical		
Herbicide	4.59	17.49
Insecticide	1.50	1
Crop insurance	3.12	6.52
Hail insurance	0.56	3.18
Miscellaneous crop inputs	2.36	0.44
Total Crop Inputs	*34.67*	*57.39*
Equipment & Building Expenses		
Fuel, oil and lubricants	3.55	3.50
Repairs and maintenance	4.78	4.42
Indirect equipment expenses	4.15	5.53
Total Equipment Expenses	*12.48*	*13.45*
Other Expenses		
Labour	4.79	4.79
Property taxes	3.11	3.42
Miscellaneous	3.33	8.02
Operating interest	2.63	3.89
Total Other Costs	*13.86*	*20.12*
Total Cash Costs	*61.01*	*90.96*
Total Cash Cost/Bushel	*1.49*	*4.79*
Depreciation buildings & equipment	18.23	19.09
Total Cash & Depreciation Cost	*79.24*	*110.05*
Net Farm Cash Income	**52.56**	**66.74**
Net Farm Income	**34.33**	**47.65**
Direct time per acre (hours)	**0.61**	**0.73**
Number of gallons fuel per acre	**2.37**	**2.33**
Investment in equipment per acre	**147.31**	**105.03**

Crop Averages For The Black Soil Zone

Crop Income

Crop Inputs

Total Equipment Costs

Miscellaneous Cash Costs

Depreciation of Buildings and Equipment

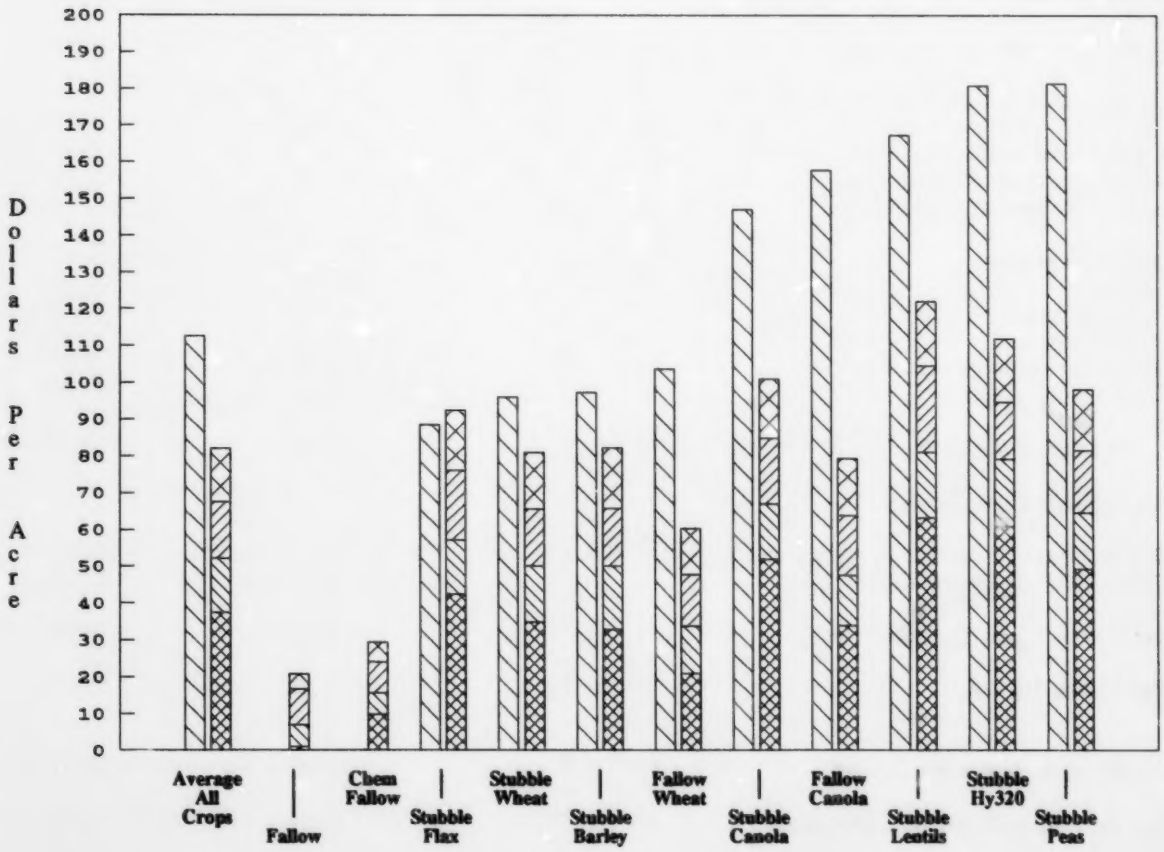


Table 4.1: Black Soil Zone

	Summerfallow	Chem Fallow	Wheat On Fallow
Number of fields in this group	19	11	18
Total acres in this crop	6266	2844	3911
Projected Income		**Dollars Per Acre**	
Price per bushel	0	0	2.80
Yield per acre	0	0	37
Total Income	*0*	*0*	*103.60*
Projected Expenses			
Crop inputs			
Seed	0.03	0	4.81
Fertilizer			
Nitrogen	0	0	0
Phosphorus	0	0	2.77
Other fertilizer	0	0.02	0
Chemical			
Herbicide	0.99	9.88	9.75
Insecticide	0	0	0
Crop insurance	0	0	1.77
Hail insurance	0	0	0.44
Miscellaneous crop inputs	0	0	1.42
Total Crop Inputs	*1.02*	*9.90*	*20.96*
Equipment & Building Expenses			
Fuel, oil and lubricants	2.84	2.13	4.01
Repairs and maintenance	2.63	2.33	5.39
Indirect equipment expenses	0.49	1.29	3.40
Total Equipment Expenses	*5.96*	*5.75*	*12.80*
Other Expenses			
Labour	5.02	5.02	5.02
Property taxes	3.47	2.73	2.80
Miscellaneous	0.81	0	4.12
Operating interest	0.33	0.75	1.97
Total Other Costs	*9.63*	*8.50*	*13.91*
Total Cash Costs	*16.61*	*24.15*	*47.67*
Total Cash Cost/Bushel			*1.29*
Depreciation buildings & equpment	4.17	5.17	12.45
Total Cash & Depreciation Cost	*20.78*	*29.32*	*60.12*
Net Farm Cash Income	**-16.61**	**-24.15**	**55.93**
Net Farm Income	**-20.78**	**-29.32**	**43.48**
Direct time per acre (hours)	**0.31**	**0.26**	**0.58**
Number of gallons fuel per acre	**1.71**	**1.37**	**2.50**
Investment in equipment per acre	**46.39**	**38.67**	**85.64**

Table 4.2: Black Soil Zone

	Canola On Fallow	Wheat On Stubble	Barley On Stubble
Number of fields in this group	32	83	45
Total acres in this crop	5803	28308	8348
Projected Income		**Dollars Per Acre**	
Price per bushel	5.63	2.91	1.87
Yield per acre	28	33	52
Total Income	*157.64*	*96.03*	*97.24*
Projected Expenses			
Crop inputs			
Seed	6.97	5.35	5.12
Fertilizer			
Nitrogen	2.81	6.80	8.32
Phosphorus	5.31	4.29	4.76
Other fertilizer	0.52	2.80	1.73
Chemical			
Herbicide	11.38	9.76	6.80
Insecticide	0.13	0	0
Crop insurance	4.02	1.99	2.16
Hail insurance	0.45	0.90	0.53
Miscellaneous crop inputs	2.37	2.96	3.43
Total Crop Inputs	*33.96*	*34.85*	*32.85*
Equipment & Building Expenses			
Fuel, oil and lubricants	4.38	4.74	6.02
Repairs and maintenance	5.15	6.18	7.66
Indirect equipment expenses	4.21	5.09	3.82
Total Equipment Expenses	*13.74*	*16.01*	*17.50*
Other Expenses			
Labour	5.02	5.02	5.02
Property taxes	3.37	2.94	3.21
Miscellaneous	5.41	4.85	4.81
Operating interest	2.53	2.65	2.63
Total Other Costs	*16.33*	*15.46*	*15.67*
Total Cash Costs	*64.03*	*66.32*	*66.02*
Total Cash Cost/Bushel	*2.29*	*2.01*	*1.27*
Depreciation buildings & equipment	15.53	15.40	16.37
Total Cash & Depreciation Cost	*79.56*	*81.72*	*82.39*
Net Farm Cash Income	**93.61**	**29.71**	**31.22**
Net Farm Income	**78.08**	**14.31**	**14.85**
Direct time per acre (hours)	**0.60**	**0.67**	**0.90**
Number of gallons fuel per acre	**2.82**	**3.11**	**3.79**
Investment in equipment per acre	**106.07**	**103.49**	**122.31**

Table 4.3: Black Soil Zone

	Canola On Stubble	Flax On Stubble	HY320 On Stubble
Number of fields in this group	39	15	21
Total acres in this crop	8873	2236	11824
Projected Income		**Dollars Per Acre**	
Price per bushel	5.88	4.42	3.17
Yield per acre	25	20	57
Total Income	*147.00*	*88.40*	*180.69*
Projected Expenses			
Crop inputs			
Seed	6.51	4.79	7.21
Fertilizer			
Nitrogen	11.75	9.27	18.06
Phosphorus	3.29	4.77	2.43
Other fertilizer	4.61	0.31	8.10
Chemical			
Herbicide	14.48	16.09	12.89
Insecticide	0.33	0	0
Crop insurance	2.66	3.78	0.65
Hail insurance	0.75	0.49	0.14
Miscellaneous crop inputs	7.53	2.91	11.46
Total Crop Inputs	*51.91*	*42.41*	*60.94*
Equipment & Building Expenses			
Fuel, oil and lubricants	4.51	5.33	4.22
Repairs and maintenance	5.66	5.15	6.76
Indirect equipment expenses	5.99	4.44	11.52
Total Equipment Expenses	*16.16*	*14.92*	*22.50*
Other Expenses			
Labour	5.02	5.02	5.02
Property taxes	3.70	4.24	2.36
Miscellaneous	5.71	6.66	4.05
Operating interest	3.45	2.98	4.08
Total Other Costs	*17.88*	*18.90*	*15.51*
Total Cash Costs	*85.95*	*76.23*	*98.95*
Total Cash Cost/Bushel	*3.44*	*3.81*	*1.74*
Depreciation buildings & equipment	16.06	16.28	17.18
Total Cash & Depreciation Cost	*102.01*	*92.51*	*116.13*
Net Farm Cash Income	**61.05**	**12.17**	**81.74**
Net Farm Income	**44.99**	**-4.11**	**64.56**
Direct time per acre (hours)	**0.62**	**0.67**	**0.73**
Number of gallons fuel per acre	**3.17**	**3.37**	**3.92**
Investment in equipment per acre	**105.74**	**107.81**	**101.86**

Table 4.4: Black Soil Zone

	Lentils On Stubble	Peas On Stubble
Number of fields in this group	13	18
Total acres in this crop	2359	3329
Projected Income	**Dollars Per Acre**	
Price per bushel	9.29	5.18
Yield per acre	18	35
Total Income	*167.22*	*181.30*
Projected Expenses		
Crop inputs		
Seed	18.06	18.45
Fertilizer		
Nitrogen	0.26	1.69
Phosphorus	4.45	3.67
Other fertilizer	0.10	6.05
Chemical		
Herbicide	22.30	13.99
Insecticide	0	0
Crop insurance	3.07	0.95
Hail insurance	0.25	1.89
Miscellaneous crop inputs	14.77	2.57
Total Crop Inputs	*63.26*	*49.26*
Equipment & Building Expenses		
Fuel, oil and lubricants	5.95	4.51
Repairs and maintenance	6.38	5.84
Indirect equipment expenses	5.61	6.12
Total Equipment Expenses	*17.94*	*16.47*
Other Expenses		
Labour	5.02	5.02
Property taxes	4.12	3.74
Miscellaneous	10.35	4.99
Operating interest	4.07	3.25
Total Other Costs	*23.56*	*17.00*
Total Cash Costs	*104.76*	*82.73*
Total Cash Cost/Bushel	*5.82*	*2.36*
Depreciation buildings & equipment	17.23	16.64
Total Cash & Depreciation Cost	*121.99*	*99.37*
Net Farm Cash Income	**62.46**	**98.57**
Net Farm Income	**45.23**	**81.93**
Direct time per acre (hours)	**0.98**	**0.61**
Number of gallons fuel per acre	**3.38**	**3.06**

Top Management Program

The Top Management program uses a computer forward planning model that generates a cost of production report as well as projected financial statements for the next five years. The computer program has been developed by Dr. Schoney at the University of Saskatchewan for Saskatchewan farmers. This computer model allows a farm manager to enter information on his farm business, develop different scenarios for the future and test the strength of the farm business. The computer program will provide specific information on:

(1) What is the best combination of crops? For each crop produced on your farm, this computer program will provide a detailed breakdown of the costs and returns. This information will allow the farm manager to determine what combination of crops is best for his farm and where cost can be reduced for each crop.

(2) Is machinery investment adequate, too high or too low? This computer program will provide cost on a per acre or per hour basis for each machine on your farm. It will provide an estimate of the number of hours a machine is used per year. This information will be valuable in deciding which equipment needs to be upgraded or downgraded.

(3) Given the present economic condition and expectations for the future, will the farm business continue to grow? Lower grain prices have substantially reduced farm incomes. Planning ahead for the next few years will make it easier to deal with the uncertainty that exists in the world markets for the crops that are produced in Saskatchewan.

Through a series of three meetings, Top Management staff will provide a detailed outline of how the program operates, explain and assist in gathering the information on each individual farm and assist in analyzing the results and looking at alternatives. Written financial reports as well as floppy diskettes with all the farm information on it are provided to each farmer. This information can be updated annually. Individuals who are interested in participating in the Top Management Program should contact their Regional Farm Management Agrologist or Dr. Schoney at the University of Saskatchewan, Saskatoon, 966-4018 or Don Barber of the Economics Branch, Saskatchewan Agriculture and Food, Room 329 - 3085 Albert Street, Regina Sk. S4S 0B1, phone 787-5962.

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